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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/803,772

**Applicant(s)**

PITHAWALA ET AL.

**Examiner**

MARIE GEORGES HENRY

**Art Unit**

2455

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 28-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 28-61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

1. This is in response to the request for continued examination filed on 01/14/2009. Claims 1, 2, 28, 34, 42, 43, 48, and 54 are amended. Claims 7-27 are cancelled. Claims 1-6 and 28-61 are pending. Claims 1-6 and 28-61 are directed to method and apparatus providing device-initiated network management.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

### **Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

*The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*

3. Claim 28 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not described in a clear manner what one or more triggers defined by the first and what report information defined by the second definition are. Appropriate clarification is needed.

**Claim Rejections - 35 USC § 102**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

*(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21 (2) of such treaty in the English language.*

5. Claims 1, 34, and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by **Lavian et al. (hereinafter "Lavian") (US 7, 433, 941 B1)**.

Regarding claim 1, Lavian discloses a method of managing a network entity that is initiated by the

network entity, the method comprising: performing, at the network entity, the computer-implemented steps of:

monitoring the network entity (Lavian, column 3, lines 45-46, a network server is monitoring network nodes);

periodically evaluating, at the network entity, one or more specified conditions of the same network entity (Lavian, column 3, lines 31-44, column 3, lines 45-46, an authentication server, having network monitoring capability, can identify a network entity and determine if that device should or should not receive a particular application);

when one or more of the specified conditions are satisfied, then: gathering specified information from the network entity; preparing a message that includes the specified information and the specified conditions that were satisfied (Lavian, column 3, lines 58-61, when bandwidth has exceeded a predetermined threshold, a notification is sent to the network device by NMS server); and

sending the message to one of a management application or a management proxy (Lavian, column 3, lines 1-4, a management information database is collecting information about devices).

Regarding claim 34, Lavian discloses a method for a network element to initiate notification to a management point about an anomalous condition, comprising the computer-implemented steps of:

requesting a management gateway that is communicatively coupled to the network element to provide one or more application requests for the network element that have been stored at the management gateway by an application (Lavian, column 4, lines 11-31, a network management application having stage areas executed on the local network device provides access to resources at the network device);

in response to said requesting, receiving from the management gateway at least a particular application request; in response to receiving the particular application request, initiating at the network element a communication session between the network element and the management application for enabling the network element to reply to the application request (Lavian, column 4, lines 25-31, a network management application executed on the local network device provides access to the network device).

Regarding claim 42, a computer-readable storage medium storing one or more instructions for self-initiated management of a network entity, wherein the one or more instructions, when executed by one or more processors, cause: performing, at the network entity, the computer-implemented steps of:

monitoring the network entity (Lavian, column 3, lines 45-46, a network server is monitoring network nodes);

periodically evaluating, at the network entity, one or more specified conditions of the same network entity (Lavian, column 3, lines 31-44, column 3, lines 45-46, an authentication server, having network monitoring capability, can identify a network entity and determine if that device should or should not receive a particular application);

when one or more of the specified conditions are satisfied, then: gathering specified information from the network entity; preparing a message that includes the specified information and the specified conditions that were satisfied (Lavian, column 3, lines 58-61, when bandwidth has exceeded a predetermined threshold, a notification is sent to the network device by NMS server); and

sending the message to one of a management application or a management proxy (Lavian, column 3, lines 1-4, a management information database is collecting information about devices).

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 35-37 and 54-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lavian** et al. (hereinafter "Lavian") (**US 7, 433, 941 B1** in view of **Green** et al. (hereinafter "Green") (**US 6, 003,084**).

Regarding claim 35, Lavian and Green disclose the method as recited in Claim 34.

Lavian does not disclose the method wherein the steps are performed by a server that is logically separate from the network element and communicatively coupled to the management gateway.



Green discloses the method wherein the steps are performed by a server that is logically separate from the network element and communicatively coupled to the management gateway (Green, column 9, lines 17-19, a proxy passes through the application of OSI protocol by using application gateway solution).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Green communication feature in Lavian method in order to create a request management method with a communication feature in order to use an external management feature.

Regarding claim 36, Lavian and Green disclose a method as recited in Claim 34.

However, Lavian does not disclose the method further comprising the step of initiating at the network element communication of at least some of the report information that is responsive to the application request.

Green discloses the method further comprising the step of initiating at the network element communication of at least some of the report information that is responsive to the application request (Green, column 3, lines 29-33, column 3, lines 35-43, the poller checks continuously network interface by sending out poller query

messages, when a message is polled, the proxy sends another message to the server stating a interface is reachable).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Green initiating feature in Lavian method in order to create a request management method with an initiating feature in order to detect abnormal connection.

Regarding claim 37, Lavian and Green disclose a method as recited in Claim 34.

Lavian does not disclose a method wherein each of the application requests comprises first definitions of one or more triggers, each comprising one or more conditions, and second definitions of report information; and further comprising the step of determining that any of the triggers is satisfied, and in response thereto, initiating at the network element communication of at least some of the report information.

Green discloses wherein each of the application requests comprises first definitions of one or more triggers, each comprising one or more conditions (Green, column 8, lines 14-24, fig.3b, in a proxy device, data conformed with predefined conditions is monitored by a connection manager), and

second definitions of report information; and further comprising the step of determining that any of the triggers is satisfied, and in response thereto, initiating at the network element communication of at least some of the report information (Green, column 3, lines 29-33, column 3, lines 35-43, the poller checks continuously network interface by sending out poller query messages, when a message is polled, the proxy sends another message to the server stating a interface is reachable).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Green initiating feature in Lavian method in order to create a request management method with an initiating feature in order to detect abnormal connection.

Regarding claim 54, Lavian discloses a computer-readable storage medium storing one or more instructions for a network element to initiate notification to a management point about an anomalous condition, wherein the one or more instructions, when executed by one or more processors, cause:

Lavian discloses a method where in response to said requesting, receiving from the management gateway at least a particular application request; in response to receiving the particular application request (Lavian, column 4, lines 29-31, loop back address provides indirect access to the network parameters of the local device).

Lavian does not disclose requesting a management gateway that is communicatively coupled to the network element to provide one or more application requests for the network element that have been stored at the management gateway by an application ; in response to said requesting, receiving from the management gateway at least a particular application request; in response to receiving the particular application request.

Green discloses requesting a management gateway that is communicatively coupled to the network element to provide one or more application requests for the network element that have been stored at the management gateway by an application (Green, column 9, lines 17-19, a proxy passes through the application of OSI protocol by using application gateway solution);

in response to said requesting, receiving from the management gateway at least a particular application request; in response to receiving the particular application request (Green, column 9, lines 6-12, the proxy replies to client and server request to other system and evaluates the request before establishing a connection between source and destination),

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Green communication feature in

Lavian system in order to create a request management system with a communication feature in order to use an external management feature.

Regarding claim 55, the computer-readable storage medium as recited in Claim 54, wherein the one or more instructions, when executed by one or more processors, cause the steps to be performed by a server that is logically separate from the network element and communicatively coupled to the management gateway (Green, column 9, lines 17-19, a proxy passes through the application of OSI protocol by using application gateway solution).

Regarding claim 56, the computer-readable storage medium as recited in Claim 54, wherein the one or more instructions, when executed by one or more processors, further cause initiating at the network element communication of at least some of the report information that is responsive to the application request (Green, column 3, lines 29-33, column 3, lines 35-43, the poller checks continuously network interface by sending out poller query messages; one a message is polls a message is sent to the server stating a interface is reachable).

Regarding claim 57, the computer-readable storage medium as recited in Claim 54, wherein each of the application requests comprises first definitions of one or more triggers, each comprising one or more conditions, and second definitions of report information; and further comprising the step of determining that any of the triggers is

satisfied, and in response thereto, initiating at the network element communication of at least some of the report information (Green, column 3, lines 29-33, column 3, lines 35-43, the poller checks continuously network interface by sending out poller query messages, when a message is polled, the proxy sends another message to the server stating a interface is reachable).

7. Claims 28, 33, 48, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Green** in view of **Herrmann** et al. (hereinafter "**Herrmann**") (**US 5, 737, 536**).

Regarding claim 28, Green discloses a method for a network element to initiate notification about an anomalous condition, comprising: at the network element or a proxy server, performing the computer-implemented steps of:

receiving first definitions of one or more triggers, each comprising one or more conditions (Green, column 8, lines 14-24, fig.3b, in a proxy device, data conformed with predefined conditions is monitored by a connection manager);

receiving second definitions of report information (Green, column 3, lines 29-33, column 3, lines 35-43, when a message is polled, the proxy sends another message to the server stating an interface is reachable).

Although Green discloses one message related to another one, he does not disclose determining that at least one of the one or more triggers defined by the first definition is satisfied, and in response thereto, initiating communication of at least some of the report information defined by the second definitions to a management proxy or a management application.

Herrmann discloses a method determining that at least one of the one or more triggers defined by the first definition is satisfied, and in response thereto, initiating communication of at least some of the report information defined by the second definitions to a management proxy or a management application (Herrmann, column 23, lines 29-35, two set of parameters are disclosed, and the second parameter depends on the record change of data recorded when the first parameter is recorded).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Herrmann first and second trigger feature in Green system in order to create a request management system with a first and second trigger feature in order to minimize error in witting record (Herrmann, column 23, lines 46-48).

Regarding claim 33, Green and Herrmann disclose a method as recited in Claim 28, in addition Green discloses a method wherein the steps are performed by the proxy server, wherein the proxy server is logically separate from the network element, wherein

the proxy server manages notifications for a plurality of network elements (Green, column 8, lines 5-14, fig.3, a proxy is not part of the network for which it monitors devices).

Regarding claim 48, Green discloses a computer-readable storage medium storing one or more instructions for a network element to initiate notification about an anomalous condition, wherein the one or more instructions, when executed by one or more processors, cause: at the network element or a proxy server, performing the computer-implemented steps of:

receiving first definitions of one or more triggers, each comprising one or more conditions (Green, column 8, lines 14-24, fig.3b, in a proxy device, data conformed with predefined conditions is monitored by a connection manager);

receiving second definitions of report information (Green, column 3, lines 29-33, column 3, lines 35-43, when a message is polled, the proxy sends another message to the server stating an interface is reachable).

Although Green discloses one message related to another one, he does not disclose determining that at least one of the one or more triggers defined by the definitions is satisfied, and in response thereto, initiating communication of at least



some of the report information defined by the second definitions to a management proxy or a management application.

Herrmann discloses a computer readable storage medium determining that at least one of the one or more triggers defined by the definitions is satisfied, and in response thereto, initiating communication of at least some of the report information defined by the second definitions to a management proxy or a management application (Herrmann, column 23, lines 29-35, two set of parameters are disclosed, and the second parameter depends on the record change of data recorded when the first parameter is recorded).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Herrmann first and second trigger feature in Green system in order to create a request management system with a first and second trigger feature in order to minimize error in witting record (Herrmann, column 23, lines 46-48).

Regarding claim 53, Green and Herrmann disclose the computer-readable storage medium as recited in Claim 48, in addition Green discloses the computer-readable medium wherein the one or more instructions, when executed by one or more processors, cause the steps to be performed by the proxy server, wherein the proxy server is logically separate from the network element, wherein the proxy server

manages notifications for a plurality of network elements (Green, column 8, lines 5-14, fig.3, a proxy is located outside of the network for which it monitors devices).

8. Claims 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lavian**, in view of **Green**, and further in view of **Davies (US 6,058,420)**.

Regarding claim 38, Lavian and Green disclose a method as recited in Claim 37,

However, Lavian and Green do not disclose the method wherein each of the conditions comprises an event, alarm, combination of events or alarms, or pattern of events or alarms.

Davies discloses the method wherein each of the conditions comprises an event, alarm, combination of events or alarms, or pattern of events or alarms (Davies, column 4, lines 5-9, a server receives alarm information).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Green initiating and Davies poll features in Lavian method in order to create a request management method with an initiating and Poll features in order to detect abnormal connection and to notify a

selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51).

Regarding claim 39, Lavian and Green disclose a method as recited in Claim 37.

However, Lavian and Green do not disclose wherein each of the conditions comprises a state of the network element.

Davies discloses the method wherein each of the conditions comprises a state of the network element (Davies, column 4, lines 35-43, the alarm has information on it).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Green initiating and Davies poll features in Lavian method in order to create a request management method with an initiating and Poll features in order to detect abnormal connection and to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51).

Regarding claim 40, Lavian and Green disclose a method as recited in Claim 37.

However, Lavian and Green do not disclose wherein the report information describes any of the triggers that were determined as satisfied.

Davies discloses the method wherein the report information describes any of the triggers that were determined as satisfied (Davies, column 3, lines 40-42, the message indicates that the device is reachable).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Green initiating and Davies poll features in Lavian method in order to create a request management method with an initiating and Poll features in order to detect abnormal connection and to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51).

Regarding claim 41, Lavian and Green disclose a method as recited in Claim 37.

However, Lavian and Green do not disclose wherein the report information comprises any of a core dump from the network element, a configuration of the network element, state information for the network element, or a log of the network element.

Davies discloses the method wherein the report information comprises any of a core dump from the network element, a configuration of the network element, state information for the network element, or a log of the network element (Davies, column 3, lines 40-42, the message indicates that the address of the device that is reachable).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Green initiating and Davies poll features in Lavian method in order to create a request management method with an initiating and Poll features in order to detect abnormal connection and to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51).

9. Claims 2-6, 43-47, and 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Green**, in view of **Lavian**, and further in view of **Davies (US 6,058,420)**.

*Green discloses the invention substantially as claimed including method and apparatus providing device-initiated network management.*

Regarding claim 2, Green discloses a method of managing a network entity that is initiated by the network entity, the method comprising:

performing, at a management proxy, the computer-implemented steps of: receiving a request from a management application for interaction with the network entity; where the management proxy is external to the management application and the network entity ( Green, column 10, lines 8-9, fig .2, the Sidewinder, a software network management, sends a request and passes the calling information to the proxy; the proxy is exterior to the network device );

in response to the poll message:

Although Green discloses a request management method, he does not disclose a method selecting one or more management requests that match the network entity; and delivering the selected one or more management requests to the network entity; wherein the management proxy is external to the management application and the network entity; storing a management request in the management proxy while awaiting a poll for the management request from the network entity; receiving a poll message from the network entity, wherein the each poll message requests any available management requests applicable to the network entity.

Davies discloses a method storing a management request in the management proxy while awaiting a poll for the management request from the network

entity (Davies, column 10, lines 61-66, the connection request is stored until the poller sends a Get request command);

receiving a poll message from the network entity, (Davies, column 11, lines 16-30, the poll Request gets a response by an interface that receives that message); and

and delivering the selected one or more management requests to the network entity; wherein the management proxy is external to the management application and the network entity (Davies, column 3, lines 35-43, after a query message is polled, a response message is sent to the server stating an interface is reachable).

Although Green and Davies disclose a request management with a poll system, they do not disclose a method based at least upon the request from the management application, creating a management request, said poll message requesting from the management proxy any available management requests applicable to the network entity, selecting one or more management requests stored in the management proxy that match the network entity.

Lavian disclosed a method based at least upon the request from the management application, creating a management request, selecting one or more management requests stored in the management that match the network entity (Lavian, column 6, lines 26-32, column 5, lines 31-33, column 4, lines 14-15, column 8, lines 32-

36, a network management application having a storage system submits requests to loopback address of an identified network device).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Davies poll feature and Lavian management entity request feature in Green method in order to create a request management method with a poll feature and an a management entity request feature in order to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51) and increase management capability (Lavian, column 3, lines 23-24).

Regarding claim 3, Green, Davies, and Lavian disclose a method as recited in Claim 2, further comprising performing, at the management proxy:

receiving a responsive management message from the network entity (Green, column 10, lines 43-44, the filter component of the proxy returns status to the communications components); storing the responsive management message in the management proxy (Green, column 10, lines 28-30, the proxy has a database that can store messages);

Although Green discloses a request management method, he does not disclose a method receiving a second poll message from the management



application, wherein the second poll message requests any responsive management messages applicable to the management application; in response to the second poll message, selecting one or more responsive management messages that match the management application; and delivering the selected one or more responsive management messages to the management application.

Davies discloses a method receiving a second poll message from the management application, wherein the second poll message requests any responsive management messages applicable to the management application; in response to the second poll message (Davies, column 3, lines 29-33, the poller checks continuously network interface by sending out a poller query message),

selecting one or more responsive management messages that match the management application; and delivering the selected one or more responsive management messages to the management application (Davies, column 3, lines 35-43, after a query message is polled, a response message is sent to the server stating an interface is reachable).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Davies poll feature and Lavian management entity request feature in Green method in order to create a request management method with a poll feature and an a management entity request feature in

order to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51) and increase management capability (Lavian, column 3, lines 23-24).

Regarding claim 4, Green, Davies, and Lavian disclose a method as recited in any of Claims 1 or 2, in addition Green discloses wherein the network entity is within a private network that is managed by a network service provider, and wherein the management proxy and the management application are within a public network that is owned or operated by the network service provider. (Green, fig. 3b, a proxy, a device belonging to a provider, is has a connection manager on it)

Regarding claim 5, Green, Davies, and Lavian disclose a method as recited in any of Claims 1 or 2, in addition Green discloses wherein the network entity is a service appliance (Green, column 4, lines 65-67, a router is disclosed).

Regarding claim 6, Green, Davies, and Lavian disclose a method as recited in any of Claims 1 or 2, in addition Green discloses wherein the network entity is a switch or router (Green, column 4, lines 65-67, a router is disclosed).

Regarding claim 43, Green discloses a computer-readable storage medium storing one or more instructions for self- initiated management of a network entity, wherein the one

or more instructions, when executed by one or more processors, cause: performing, at a management proxy, the computer-implemented steps of:

receiving a request from a management application for interaction with the network entity; wherein the management proxy is external to the management application and the network entity ( Green, column 10, lines 8-9, fig.2, The Sidewinder, a network management software, sent a request and pass the calling information to the proxy; the proxy is exterior to the network device );

in response to the poll message:

Although Green discloses computer readable medium storage a request management method, he does not disclose a computer readable medium selecting one or more management requests that match the network entity; and delivering the selected one or more management requests to the network entity; storing a management request in the management proxy while awaiting a poll for the management request from the network entity; receiving a poll message from the network entity, said poll message requesting from the management proxy any available management requests applicable to the network entity;

Davies discloses a computer readable medium selecting one or more management requests stored in the management proxy that match the network entity;

and delivering the selected one or more management requests to the network entity (Davies, column 3, lines 35-43, after a query message is polled, a response message is sent to the server stating an interface is reachable).

storing a management request in the management proxy while awaiting a poll for the management request from the network entity (Davies, column 10, lines 61-66, the request is stored until the poller sent a Get request command);

receiving a poll message from the network entity, wherein each poll message requests any available management requests applicable to the network entity (Davies, column 11, lines 16-30, the poll Request get a response by an interface that receives that message);

Although Green and Davies disclose a request management with a poll system, they do not disclose a computer readable medium based at least upon the request from the management application, creating a management request, said poll message requesting from the management proxy any available management requests applicable to the network entity, selecting one or more management requests stored in the management proxy that match the network entity.

Lavian disclosed a method based at least upon the request from the management application, creating a management request, selecting one or more management requests stored in the management that match the network entity (Lavian,

column 6, lines 26-32, column 5, lines 31-33, column 4, lines 14-15, column 8, lines 32-36, a network management application having a storage system submits requests to loopback address of an identified network device).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Davies poll feature and Lavian management entity request feature in Green system in order to create a request management system with a poll feature and an a management entity request feature in order to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51) and increase management capability (Lavian, column 3, lines 23-24).

Regarding claim 44, Green, Davies, and Lavian disclose the computer-readable storage medium as recited in Claim 43, in addition Green discloses further comprising one or more instructions that, when executed by one or more processors, cause the management proxy to perform the steps of:

receiving a responsive management message from the network entity (Green, column 10, lines 43-44, the filter component of the proxy returns status to the communications components); storing the responsive management message in the management proxy (Green, column 10, lines 28-30, the proxy has a database that can store messages);

receiving a second poll message from the management application, wherein the second poll message requests any responsive management messages applicable to the management application (Green, column 3, lines 29-33, column 3, lines 35-43, the poller checks continuously network interface by sending out poller query messages, when a message is polled, the proxy sends another message to the server stating a interface is reachable);

in response to the second poll message: selecting one or more responsive management messages that match the management application; and delivering the selected one or more responsive management messages to the management application (Green, column 3, lines 35-43, after a query message is polls, a response message is sent to the server stating an interface is reachable).

Regarding claim 45, Green, Davies, and Lavian disclose the computer-readable storage medium as recited in any of Claims 42 or 43, in addition Green discloses wherein the network entity is within a private network that is managed by a network service provider, and wherein the management proxy and the management application are within a public network that is owned or operated by the network service provider. (Green, fig. 3b, a proxy, a device belonging to a provider, has a connection manager on it)

Regarding claim 46, Green, Davies, and Lavian disclose the computer-readable storage medium as recited in any of Claims 42 or 43, in addition Green discloses wherein the network entity is a service appliance (Green, column 4, lines 65-67, a router is

disclosed).

Regarding claim 47, Green, Davies, and Lavian disclose the computer-readable storage medium as recited in any of Claims 42 or 43, in addition Green discloses wherein the network entity is a switch or router (Green, column 4, lines 65-67, a router is disclosed).

Regarding claim 58, Green and Lavian disclose the computer-readable storage medium as recited in Claim 57.

Although Green discloses computer readable medium storage a request management method, he does not disclose a computer readable medium wherein each of the conditions comprises an event, alarm, combination of events or alarms, or pattern of events or alarms.

Davies discloses a computer readable medium wherein each of the conditions comprises an event, alarm, combination of events or alarms, or pattern of events or alarms (Davies, column 4, lines 5-9, a server receives alarm information).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Davies poll feature and Lavian management entity request feature in Green method in order to create a request management method with a poll feature and an a management entity request feature in

order to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51) and increase management capability (Lavian, column 3, lines 23-24).

Regarding claim 59, Green and Lavian disclose the computer-readable storage medium as recited in Claim 57.

Although Green discloses computer readable medium storage a request management method, he does not disclose a computer readable medium wherein each of the conditions comprises a state of the network element.

Davies discloses a computer readable medium wherein each of the conditions comprises a state of the network element (Davies, column 4, lines 47-51, a device address is part of sent information).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Davies poll feature and Lavian management entity request feature in Green method in order to create a request management method with a poll feature and an a management entity request feature in order to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51) and increase management capability (Lavian, column 3, lines 23-24).



Regarding claim 60, Green and Lavian disclose the computer-readable storage medium as recited in Claim 57.

Although Green discloses computer readable medium storage a request management method, he does not disclose a computer readable medium wherein the report information describes any of the triggers that were determined as satisfied.

Davies discloses a computer readable medium wherein the report information describes any of the triggers that were determined as satisfied (Davies, column 3, lines 40-42, the message indicates that the device is reachable).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Davies poll feature and Lavian management entity request feature in Green method in order to create a request management method with a poll feature and an a management entity request feature in order to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51) and increase management capability (Lavian, column 3, lines 23-24).

Regarding claim 61, Green and Lavian disclose the computer-readable storage medium as recited in Claim 57.

Although Green discloses computer readable medium storage a request management method, he does not disclose a computer readable medium wherein the report information comprises any of a core dump from the network element, a configuration of the network element, state information for the network element, or a log of the network element.

Davies discloses a computer readable medium wherein the report information comprises any of a core dump from the network element, a configuration of the network element, state information for the network element, or a log of the network element (Davies, column 3, lines 40-42, the message indicates that the address of the device that is reachable).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Davies poll feature and Lavian management entity request feature in Green method in order to create a request management method with a poll feature and an a management entity request feature in order to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51) and increase management capability (Lavian, column 3, lines 23-24).

10. Claims 29-32 and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Green**, in view of **Davies** and further in view of **Herrmann**.

Regarding claim 29, Green and Herrmann disclose a method as recited in Claim 28.

Although Green discloses a request management method, he does not disclose a method wherein each of the conditions comprises an event, alarm, combination of events or alarms, or pattern of events or alarms.

Davies discloses a method wherein each of the conditions comprises an event, alarm, combination of events or alarms, or pattern of events or alarms (Davies, column 4, lines 35-43, a server receives alarm information).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Herrmann first and second trigger feature and Davies alarm feature in Green system in order to create a request management system with a first and second trigger feature and an alarm feature in order to minimize error in witting record (Herrmann, column 23, lines 46-48) and to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51).

Regarding claim 30, Green and Herrmann disclose a method as recited in Claim 28.

Although Green discloses a request management method, he does not disclose a method wherein each of the conditions comprises a state of the network element.

Davies discloses a method wherein each of the conditions comprises a state of the network element (Davies, column 4, lines 47-51, a device address is part of sent information).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Herrmann first and second trigger feature and Davies alarm feature in Green system in order to create a request management system with a first and second trigger feature and an alarm feature in order to minimize error in witting record (Herrmann, column 23, lines 46-48) and to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51).

Regarding claim 31, Green and Herrmann disclose a method as recited in Claim 28.

Although Green discloses a request management method, he does not disclose a method wherein the report information describes any of the triggers that were

determined as satisfied.

Davies discloses a method wherein the report information describes any of the triggers that were determined as satisfied (Davies, column 3, lines 40-42, the message indicates that the device is reachable).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Herrmann first and second trigger feature and Davies alarm feature in Green system in order to create a request management system with a first and second trigger feature and an alarm feature in order to minimize error in witting record (Herrmann, column 23, lines 46-48) and to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51).

Regarding claim 32, Green and Herrmann disclose a method as recited in Claim 28.

Although Green discloses a request management method, he does not discloses a method wherein the report information comprises any of a core dump from the network element, a configuration of the network element, state information for the network element, or a log of the network element.

Davies discloses a method wherein the report information comprises

any of a core dump from the network element, a configuration of the network element, state information for the network element, or a log of the network element (Davies, column 3, lines 40-42, the message indicates that the address of the device that is reachable).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Herrmann first and second trigger feature and Davies alarm feature in Green system in order to create a request management system with a first and second trigger feature and an alarm feature in order to minimize error in witting record (Herrmann, column 23, lines 46-48) and to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51).

Regarding claim 49, Green and Herrmann disclose the computer-readable storage medium as recited in Claim 48.

Although Green discloses computer readable medium storage a request management method, he does not disclose a computer readable medium wherein each of the conditions comprises an event, alarm, combination of events or alarms, or pattern of events or alarms.

Davies discloses a computer readable medium wherein each of the

conditions comprises an event, alarm, combination of events or alarms, or pattern of events or alarms (Davies, column 4, lines 5-9, a server receives alarm information).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Herrmann first and second trigger feature and Davies alarm feature in Green system in order to create a request management system with a first and second trigger feature and an alarm feature in order to minimize error in witting record (Herrmann, column 23, lines 46-48) and to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51).

Regarding claim 50, Green and Herrmann disclose the computer-readable storage medium as recited in Claim 48.

Although Green discloses computer readable medium storage a request management method, he does not disclose a computer readable medium wherein each of the conditions comprises a state of the network element.

Davies discloses a computer readable medium wherein each of the conditions comprises a state of the network element (Davies, column 4, lines 47-51, a device address is part of sent information).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Herrmann first and second trigger feature and Davies alarm feature in Green system in order to create a request management system with a first and second trigger feature and an alarm feature in order to minimize error in witting record (Herrmann, column 23, lines 46-48) and to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51).

Regarding claim 51, Green and Herrmann disclose the computer-readable storage medium as recited in Claim 48.

Although Green discloses computer readable medium storage a request management method, he does not disclose a computer readable medium wherein the report information describes any of the triggers that were determined as satisfied.

Davies discloses a computer readable medium wherein the report information describes any of the triggers that were determined as satisfied (Davies, column 3, lines 40-42, the message indicates that the device is reachable).

Therefore, it would have been obvious to one having ordinary skill in



the art at the time the invention was made to implement Herrmann first and second trigger feature and Davies alarm feature in Green system in order to create a request management system with a first and second trigger feature and an alarm feature in order to minimize error in witting record (Herrmann, column 23, lines 46-48) and to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51).

Regarding claim 52, Green and Herrmann disclose the computer-readable storage medium as recited in Claim 48.

Although Green discloses computer readable medium storage a request management method, he does not disclose a computer readable medium wherein the report information comprises any of a core dump from the network element, a configuration of the network element, state information for the network element, or a log of the network element.

Davies discloses a computer readable medium wherein the report information comprises any of a core dump from the network element, a configuration of the network element, state information for the network element, or a log of the network element (Davies, column 3, lines 40-42, the message indicates that the address of the device that is reachable).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Herrmann first and second trigger feature and Davies alarm feature in Green system in order to create a request management system with a first and second trigger feature and an alarm feature in order to minimize error in witting record (Herrmann, column 23, lines 46-48) and to notify a selected device among devices in a network when to send a message to the management system (Davies, column 3, lines 44-51).

11. The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure. Clark et al. (US 6,131,117) is made part of the record because of the teaching of monitoring network resources. Buyukkoc et al. (US 6,189,043 B1) is made part of the record because of the teaching of monitoring service requests. Martin (US 6,263,368 B1) is made part of the record because of the monitoring traffic network. Hogan et al. (US 6,279,038 B1) is made part of the record because of the teaching of fraud detection system. Massa et al. (US 6,658,469 B1) is made part of the record because of the teaching of observing applications.

### **Conclusion**

12. Any inquiry concerning this communication from the examiner should be **directed to Marie Georges Henry whose telephone number is (571) 274-3226**. The examiner can normally be reached on Monday to Friday 7:30am - 4:00pm. If attempts to reach the

examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marie Georges Henry/  
Examiner, Art Unit 2455

/saleh najjar/  
Supervisory Patent Examiner, Art Unit 2455